



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION I  
1 CONGRESS STREET, SUITE 1100, BOSTON, MA 02114

MEMORANDUM

**DATE :** July 10, 2000

**SUBJ :** National Remedy Review Board (NRRB), GE/Housatonic River Site

**TO:** Bruce K. Means, Chair

**FROM:** Patricia L. Meaney, Director *Patricia L. Meaney*  
Office of Site Remediation and Restoration  
Region I

The EPA Region I Office of Site Remediation and Restoration has completed its review of your memorandum entitled "National Remedy Review Board Recommendations for the General Electric/Pittsfield Housatonic River Site," dated June 16, 2000. Your memorandum contained four "advisory recommendations" based on the Board's review of the informational package submitted by Region I and the discussions with Bryan Olson, Chet Janowski and John Kilborn held on May 17, 2000 in Salt Lake City, Utah. The Region's responses to the Board's recommendations are as follows:

**Recommendation 1** - *The written materials presented to the board did not include a clear rationale for the one part per million (ppm) polychlorinated byphenyl (PCB) removal level for river sediments. Subsequent materials and discussions helped to clarify the rationale. The board recommends that the region clearly describe the process for the selection of the one ppm PCB removal level for river sediments in the action memorandum/decision document for this action.*

**Response to Recommendation 1** - The Region agrees with the Board's concern for clearly presenting the rationale for the 1 ppm removal goal for river sediments. The information presented to the Board during the discussions on May 17, 2000 will be presented in the Action Memorandum as recommended.

**Recommendation 2** - *While the information presented to the board demonstrated elevated human health risks supporting this proposed cleanup of 1.5 miles of river, it did not include human health risks related to consuming contaminated fish, which increases overall site risks. The board recommends that the decision document for this action acknowledge the risks due to*

*Housatonic River fish consumption, and that this action is an important component in the site-wide strategy to reduce those risks.*

**Response to Recommendation 2** - Although the material presented to the Board did not address health risks associated with eating fish from the 1 1/2 mile EE/CA Reach, the risks from eating fish from the Housatonic River were evaluated by Mary Ballew, Environmental Scientist, in Region I, in a memorandum entitled “Potential Human Health Risks from Consuming Fish from the Housatonic River in Massachusetts” dated May 14, 1998. (Ms. Ballew’s memorandum was part of the human health risk evaluation conducted for EPA’s May 26, 1998 Action Memorandum that authorized the EE/CA for the 1 1/2 Mile Reach.) Ms. Ballew’s memorandum concludes that, because of the high levels of PCBs found in fish tissue, that consumption of fish from the Housatonic River, even for periods as short as one summer, presents a significant risk to human health. As recommended, the Action Memorandum for the 1 1/2 mile EE/CA Reach will include a discussion of the evaluation performed by Ms. Ballew as well as a discussion on how the EE/CA removal action is an important component in the site-wide strategy to reduce human health risks due to fish consumption.

**Recommendation 3** - *The information presented to the board states that the contaminated river banks in residential areas could be excavated to a depth of up to 15 feet. The board believes the proposed excavation depth of 15 feet may be overly protective for river bank soils and may add significantly to the cost of soil or sediment removal. The board recommends that the Region reconsider the 15 foot excavation criterion for river bank soils.*

**Response to Recommendation 3** - In response to this comment, the final chapter of the EE/CA, Chapter 6 - Recommended Alternative, has been modified to read “Because existing laws and regulations restrict excavation of riverbanks, EPA and MADEP agree that applying the residential cleanup goal of 2 ppm below 3 feet in the riverbanks is overly conservative, due to the reduced potential for human exposure. Rather, applying a recreational type exposure scenario to residential bank soils below 3 feet is more indicative of the exposures that could be expected. Therefore, residential bank soils below 3 feet will be cleaned up to meet an average PCB concentration of 10 ppm. This will result in an increase to the total volume of bank soil proposed for excavation (See Section 6.1.4). This change also reflects the recommendation made by the National Remedy Review Board (NRRB) during their review of this project.” The cleanup criteria, as specified in Chapter 6 of the EE/CA, for the riverbanks on residential property is now:

Maximum 2 ppm, based on a 95% UCL, in the 0 - 3 ft. depth.

Average PCB concentration within the 3 - 6 ft. depth interval is not to exceed 10 ppm.

The maximum PCB concentration at any sample location below 3 ft. cannot exceed 50 ppm.

If the average PCB concentration exceeds 10 ppm, remove bank soils at 1-ft. intervals and replace with soils with “non-detect” PCBs (0.6 ppm) and recalculate the average PCB concentration over the 3 - 6 ft. interval.

**Recommendation 4** - *The rationale for the three foot maximum depth of excavation for “recreational” land use is unclear in the written materials presented to the board. The board notes that this depth is based in part on ecological receptors, among other factors not typically associated with “recreational” land use. The board recommends the region better describe the rationale for this excavation depth in the action memorandum/decision document.*

**Response to Recommendation 3** - The Region agrees with the Board’s concern for clearly presenting the rationale for the three foot maximum depth of excavation for “recreational” land use. As indicated in your comment, the rationale for excavating a maximum of 3 feet on “recreational” property is based in part on protection of ecological receptors. In addition to protection of ecological receptors, the 3 foot excavation depth is based on reducing human health exposures, reducing long-term maintenance within this reach and minimizing the potential for erosion of residual PCB-containing bank soil that could result in re-contamination of river sediments or impact down stream ecological receptors. Cleanup to a depth of three feet on recreational property is also consistent with the cleanup standard contained in the proposed Consent Decree for other locations on GE owned and non-GE owned property. As recommended, this rationale will be clearly presented in the Action Memorandum for the 1 ½ mile EE/CA Reach.